

A4

9. (Amended) A method as claimed in claim 1 [any of the preceding claims], wherein said step of using said channel identifier at said second port for mapping said data into a time slot position of said second bitstream into a time slot position of said third bitstream comprises:

addressing an entry in a channel-to-slot table using said channel identifier as an address;

reading information designating a time slot position in the respective bitstream from said entry in said channel-to-slot table;

addressing an entry in a slot-to-next slot table using said information designating a time slot position;

reading, from said entry in said slot-to-next slot table, information as to the position of the next time slot that forms part of the channel identified by said channel identifier on the respective bitstream; and

writing said information as to the position of the next time slot into said channel-to-slot table at said entry in said channel-to-slot table, to be used at the next addressing thereof.

AS

12. (Amended) A method as claimed in claim 1 [any one of claims 1-8], wherein said step of using said channel identifier at said second port for mapping said data into a time slot position of said second bitstream into a time slot position of said third bitstream comprises:

selecting a channel specific FIFO buffer based upon said channel identifier;

storing said data in the selected channel specific FIFO buffer; and

writing data stored in said channel specific FIFO buffer into time slot positions defining said channel on the respective bitstream.

ALP
LAW OFFICES OF
SKJERNEN, MORRILL,
MACPHERSON, FRANKLIN
& FRIEL LLP
25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110
(408) 453-9200
FAX (408) 453-7979

13. (Amended) A method as claimed in claim 1 [any one of the preceding claims], wherein channel management is provided by the dynamic allocation and deallocation of time slots to/from in accordance with changing user capacity requirements.

A7

14. (Amended) A method as claimed in claim 1 [any one of the preceding claims], wherein said channel is defined by two or more time slot positions within each frame of at least one of said bitstream.

A8

18. (Amended) An apparatus as claimed in claim 16 [or 17], comprising a bitstream for transferring said data and said channel identifier between said ports.

A9

21. (Amended) An apparatus as claimed in claim 15 [any one of claims 15-20], wherein said mapping means are arranged to use said channel identifier at said second and third port for mapping said data into the next available time slot position, of the respective bitstream, that forms part of the channel that is identified by said channel identifier.

22. (Amended) An apparatus as claimed in claim 15 [any one of claims 15-21], wherein said mapping means are arranged to transmit data received from time slot positions that define said channel on said first bitstream in said second and third bitstream in maintained mutual order.

23. (Amended) An apparatus as claimed in claim 15 [any one of claims 15-22], wherein said mapping means comprises, for each one of said second port and said and third port:

a channel-to-slot table (640) having entries which are addressable using the channel identifier as address and which provide information, at the respective entry, as to a respective time slot position of the respective bitstream; and

a slot-to-next slot table (660) having entries which are addressable using said information as to a time slot position of the respective bitstream and which provides information, at each respective entry, as to the position of the next time slot that forms part of the channel identified by said channel identifier on the respective bitstream.

LAW OFFICES OF
SKJERVEN, MORRILL,
MACPHERSON, FRANKLIN
& FRIEL LLP

25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110
(408) 453-9200
FAX (408) 453-7979